## Dart Hawkesbury 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada Tel (613) 632-6200

Print

PONO	PO040262 MCM001-					The barry was				
Supplier	MCM001-									
No		N	Ca		5		0	α	9	- 2
No Terms	1 2% 10 Net 30									
Item	SWA3-700	SWA6A-1900	2 M4130NR2.000	M6061T6H0.312	MT-01-R0.500	3896T31		90146A059	90177A218	90287A640
Description	Ball Bearing	Female Spade Terminal - 1/4"	4130 Steel Round Bar 2.000***: MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft		Tool Steel Round Bar 0.500 dia.	Ferule 1/16 X 3/8"" - Aluminum	RTV (LOCTITE 598): RTV, Loctite 598	Pin Bent-Pull Clevis Pin with Hairpin Cotter Pin 5/16" Dia, 2-1/2" Usable Length	Split Ring Zinc-Plated Steel Split Ring 1" OD, 13/16" ID, 1/8" Thick	Threaded Stud 3/8-16 X 4.0***
Part										
Part Project										
ID Qty										
Qty	400	200	0	12		200	0	to	100	25
Date	400 6/26/2018									
Quantity	400	200		72	12	200	<u></u>	10	100	25
Job No No										
Contain	S084068	S084069	S084011	\$084012	S084013	S084066	S084065	S084067	S084070	S084058
Status	Stock	Stock	Stock	Stock	Stock	Stock	Stock	Stock	Stock	Stock
Receive	6/25/2018	6/25/2018	6/25/2018	6/25/2018	6/25/2018 \$ 2.87 / ft	6/25/2018	6/25/2018	6/25/2018 \$ 2.59 / Ea	6/25/2018	6/25/2018
Price/Unit	6/25/2018 \$ O.11 / Ea	\$0.07/Ea	\$ 39.21/11	\$2.02/ft	\$ 2.87/ft	6/25/2018 \$ 0.13 / Ea	6/25/2018 \$ 14.36 / Ea	\$ 2.59 / Ea	\$0.25/Ea	\$ 1.65 / Ea
Aging Days		_				<u> </u>	_			
Past										
Total	\$42.24	\$14.40	\$235.23	\$24.22	\$34.44	\$26.24	\$86.16	\$25.90	\$24.52	\$41.25
Supplier	McMaste: Carr Supply Co,	\$14.40 McMaster- Carr Supply Co,	\$235.23 McMaster- Carr Supply Co,	McMaster- Carr Supply Co,	\$34.44 McMaster- Carr Supply	\$26.24 McMaster- Carr Supply Co,	\$86.16 McMaster- Carr Supply Co,	\$25.90 McMaster- Carr Supply	\$24.52 McMaster- Carr Supply	McMaster- Carr

0107/07/0

											PO No
											Supplier Item
		20	19	18	7 (		15	4	13	12	No
					-2			-	ω	N	No
											Terms
		95229A490	92620A540	74	B3.000X4.000- W 2 6718K52		MC1095S.020	98470A133	98381A508	94975A162	
		Yellow-Chromate Plated Hex Head Screw Flat Washer receive pcs	Hex Head Cap Screw Zinc	D4182-1 Rod End Bearing D4777-1	4"" receive ft  Fitting, Quick Disconnect	Spring Steel Sheet .020: MCMASTER P/N: 9036K499 X 1 PK MIL-B- 5687D BLUE FINISHED AND POLISHED 1095 SPRING STEEL .020 6"" X 20' COIL receive sf	D4811-1	Pin, Quick Release	Release Pin W/Lanyard	Plange Hex Nut	Description
											Part
	-		-								Part Project Equipment Order
TOTAL.											quipment
1,303	3	3	3	20 6	2 2		-	5 2	10	20	Order Qty
				20 0/20/2010	2 6/27/2018						Due Date
7.303		i i		20 6	2	, d	10	50	10	20	Received Quantity
											Accounting Container Job No No
	S084064					S084057	S084073	S084059	S084072	\$084061	Containe
	Stock		nacuve	Inactive	Stock	Stock	Inactive	Stock	Stock	Stock	Status
	6/25/2018 \$	6/25/2018	111dCitye 6/25/2018	Inactive 6/25/2018 \$ 5.64 / pcs	6/26/2018 \$ 94.00 / ft	6/25/2018	nactive 6/25/2018 \$ 3.01 / pcs	6/25/2018	6/25/2018	6/25/2018	Receive Date
	\$ 0.06 / pcs	\$0.12/Ea	\$ 17.14 / pcs	\$5.64 / pcs	\$ 94.00 / ft	\$7.61/sf	\$ 3.01 / pcs	\$ 0.16/Ea	\$4.49/Ea	\$ 2.28 / Ea	Price/Unit
		_	_	_	0						Agin
9										~	Aging Past Days Due
20 430	\$6.07	\$12.01	\$342.80	\$56,40	\$188.00	\$76.08	\$30.10	\$7.80	\$44.9	\$45.60	Total
	McMaster- Carr Supply Co,	\$12.01 McMaster- Carr Supply Co,	\$342.80 McMaster- Carr Supply Co,	\$56.40 McMaster- Carr Supply Co,	\$188.00 McMaster- Carr Supply Co,	\$76.08 McMaster- Carr Supply Co,	\$30.10 McMaster- Carr Supply Co,	\$7.80 McMaster- Carr Supply Co,	\$44.90 McMaster- Carr Supply Co,	2000	Supplier

Plex 6/26/2018 9:18 AM dart. Tollis. Andrew



200 Aurora Industrial Pkwy Aurora OH 44202-8087 330-995-5500 cle.sales@mcmaster.com

Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada Purchase Order PO040262

Order Placed By Chantal Lavoie

McMaster-Carr Number 5264022-04

Page 1 of 2 06/20/2018

		5204022-04		
Lir	ne	Product	Ordered Shi	ipped
1	9529K15	Hardened 440C Stainless Steel Ball, 1/4" Diameter, Packs of 100	Packs	4
2	69525K16	Noninsulated Quick-Disconnect Terminals, Single-Crimp Female, 16-14 Gauge, 1/4" Wide $\times$ 0.032" Thick Tab, Packs of 100	Packs	2
6	3896T31	Wire Rope Compression Sleeve for 1/16" Rope Diameter - Not for Lifting, Packs of 50	4 Pagks	4
7	6641A41	Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube	6 Each	6
8	90146A059	Bent-Pull Clevis Pin with Hairpin Cotter Pin, Zinc-Plated Steel, 5/16" Diameter, 2-1/2" Usable Length	10 Fach	10
9	90177A218	Zinc-Plated Steel Split Rings, 1" OD, 13/16" ID, 1/8" Thick, Packs of 50	2 Packs	2
10	90281A640	Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	25 Each	25
11	91030A031	Low-Strength Steel Flange Nut, Black-Oxide. 3/8"-16 Thread Size	20 Each	20
12	94975A162	18-8 Stainless Steel Ring-Grip Quick-Release Pin with Lanyard, 1/4" Diameter, 1-5/16" Usable Length	10 Each	10
13	98381A508	Dowel Pin, Alloy Steel, 3/16" Diameter, 3/4" Long, Packs of 50	Pack	1
14	98470A133	Shoulder-Style Ring-Grip Quick-Release Pin, 18-8 Stainless Steel, 1/4" Diameter, 1-5/16" Usable Length	10 Each	10
15	9036K499	Wear-Resistant 1095 Spring Steel, 0.0200" Thick, 6" Wide, 20 Feet Long	1 Each	1
6	8733K243	Cast Nylon Bar, 4" Wide, 3" Thick, 2' Length	2 Feet	2
7	6718K52	303 Stainless Steel Industrial-Shape Air Hose Coupling, Plug, 1/4 Coupling Size, 1/4 NPTF Female End	10 Each	10
8	59915K274	Corrosion-Resistant Ball Joint Rod End, 3/8"-24 Thread, Right Hand	20 Each	20
9	92620A540	Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 1/4"-20 Thread Size, 3/4" Long, Packs of 100	1 Pack	1
0	95229A490	Cadmium-Plated Steel MIL. Spec. Washer for 3/8" Screw Size, NAS 1149-F0663P, Packs of 100	Pack	1

200 Aurora Industrial Pkwy Aurora OH 44202-8087 330-995-5500 cle.sales@mcmaster.com

Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada Purchase Order PO040262

Order Placed By Chantal Lavoie

McMaster-Carr Number 5264022-04

Page 2 of 2 06/20/2018

Lin	е	Description	Ordered S	hipped
5	8893K1	Tight-Tolerance Multipurpose O1 Tool Steel Rod, 0.5000" Diameter, 6 Feet Long	2 Each	2



200 Aurora Industrial Pkwy Aurora OH 44202-8087 330-995-5500 cle.sales@mcmaster.com Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada Purchase Order PO040262

Order Placed By Chantal Lavoie

McMaster-Carr Number 5264022-02

Page 1 of 1 06/20/2018

Line	Product	Ordered	Shipped
3 <b>6673T3</b> 4	Easy-to-Weld 4130 Alloy Steel Rod, 2" Diameter, 6 Feet Long	1 Each	1
	G 49		
Shipped sep	arately from our New Jersey warehouse on 06/20		
5 <b>8893K1</b>	Tight-Tolerance Multipurpose O1 Tool Steel Rod, 0.5000" Diameter, 6 Feet Long	2 Each	2



200 Aurora Industrial Pkwy Aurora OH 44202-8087 330-995-5500 cle.sales@mcmaster.com Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada Packing List

Purchase Order PO040262

Order Placed By Chantal Lavoie

McMaster-Carr Number 5264022-03

Page 1 of 1 06/20/2018

Lin	e	Product		Ordered	Shipped
4	89845K74	6061 Aluminum Hex Bar, 5/16" Wide, 6 Feet Long	DAS 9 9-89	2 Each	2
Sh	ipped separa	ately from our New Jersey warehouse on 06/20	1		
5	8893K1	Tight-Tolerance Multipurpose O1 Tool Steel Rod, 0.50	000" Diameter, 6 Feet Long	2 Each	2



200 Aurora Industrial Pkwy Aurora OH 44202-8087 330-995-5500 cle.sales@mcmaster.com Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7. Canada Purchase Order PO040262

Order Placed By Chantal Lavoie

McMaster-Carr Number 5264022-01

Page 1 of 2 06/20/2018

	5264022-01				
Line	Product	Ordered	Shipped		
5 <b>8893K</b>		2 Each	(2		
Shipped se	parately from our Cleveland warehouse on 06/20	-			
1 9529K1	5 Hardened 440C Stainless Steel Ball, 1/4" Diameter	4 Packs	4		
2 <b>69525</b> k	Noninsulated Quick-Disconnect Terminals, Single-Crimp Female, 16-14 Gauge, 1/4" Wid x 0.032" Thick Tab	e 2 Packs	2		
3 <b>6673</b> T3	4 Easy-to-Weld 4130 Alloy Steel Rod, 2" Diameter, 6 Feet Long	1 Each	1		
4 89845K	74 6061 Aluminum Hex Bar, 5/16" Wide, 6 Feet Long	2 Each	2		
3 <b>896T3</b>	1 Wire Rope Compression Sleeve for 1/16" Rope Diameter - Not for Lifting	4 Packs	4		
<sup>7</sup> 6641A4	1 Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube	6 Each	6		
90146A	059 Bent-Pull Clevis Pin with Hairpin Cotter Pin, Zinc-Plated Steel, 5/16" Diameter, 2-1/2" Usable Length	10 Each	10		
90177A	218 Zinc-Plated Steel Split Rings, 1" OD, 13/16" ID, 1/8" Thick	2 Packs	2		
0 <b>90281</b> A	640 Setup Stud, 3/8"-16 Thread Size, 4" Long, 1-1/4" Long Threads	25 Each	25		
1 91030A	031 Low-Strength Steel Flange Nut, Black-Oxide, 3/8"-16 Thread Size	20 Each	20		
2 <b>94975A</b>	162 18-8 Stainless Steel Ring-Grip Quick-Release Pin with Lanyard, 1/4" Diameter, 1-5/16" Usable Length	10 Each	10		
13 <b>98381</b> A	508 Dowel Pin, Alloy Steel, 3/16" Diameter, 3/4" Long	1 Pack	1		

McMaster-Carr Supply Company Invoice: 65845254 ORIGINAL COMMERCIAL 200 Aurora Industrial Pkwy Purchase Order: PO040262 Aurora, OH 44202-8087 USA Phone: 330-995-5500 Fax: 330-995-9600 Release: E-Mail: cle.sales@mcmaster.com Employer Identification Number (EIN): 36-1458720 McMaster-Carr Number: 5264022-04 CERTIFICATE OF ORIGIN Ultimate Destination: Shipped: 20-Jun-2018 Dart Aerospace Ltd 1270 Aberdeen St Shipper's Export Declaration (SED): NO EEI 30.36 Hawkesbury ON K6A 1K7 Canada Intermediate Consignee: Bill To: Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada Tax Number: Forwarding Agent: Billing Attention: Shipping Attention: Contact: Line Description Qty & Unit **Unit Price** Extension 9529K15 Hardened 440C Stainless Steel Ball, 1/4" Diameter, Packs of 100 1 PK \$10.56 \$42.24 Country of Origin: Peoples Republic of China Schedule B #: 848291 ECCN#: EAR99 NLR 2 69525K16 Noninsulated Quick-Disconnect Terminals, Single-Crimp Female, 16-14 Gauge, PK 2 \$7.20 \$14.40 1/4" Wide x 0.032" Thick Tab, Packs of 100 Country of Origin: United States Schedule B #: 853690 ECCN#: EAR99 NLR Wire Rope Compression Sleeve for 1/16" Rope Diameter - Not for Lifting, Packs 6 3896T31 PK \$6.56 \$26.24 Country of Origin: United States Schedule B #: 761699 ECCN#: EAR99 NLR 7 6641A41 Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube 6 EΑ \$14.36 \$86.16 Country of Origin: United States Schedule B #: 321410 ECCN#: EAR99 NLR Bent-Pull Clevis Pin with Hairpin Cotter Pin, Zinc-Plated Steel, 5/16" Diameter, 8 90146A059 10 EA \$2.59 \$25.90 2-1/2" Usable Length Country of Origin: United States Schedule B #: 731829 ECCN#: EAR99 NLR Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department. Shipping Weight (in kgs): 18 Number of Packages: 1 Invoice Amounts: Merchandise Amount: \$1,070.47 Canadian GST/HST: \$142.31 Package Dimensions: Shipping Charges: \$24.29 52 X 52 X 43 CM = .114 CUBIC M Total (In USD): \$1,237.07 Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days Remit payment to: (by wire transfer) Bank of America 222 Broadway (by mail) Authorized Signature: Date: McMaster-Carr Supply Company New York, NY 10038 20-Jun-2018 PO Box 7690 Account 86666-02021 Sal Weich-Chicago, IL 60680-7690 USA SWIFT BOFAUS3N Name: Sarah Weinberg Title: Operations Mgr. Page 1 of 3

McMaster-Carr Supply Company 200 Aurora Industrial Pkwy Aurora, OH 44202 Phone: 330-995-5500 44202-8087 USA

E-Mail: cle.sales@mcmaster.com

Fax: 330-995-9600

Invoice: 65845254

Purchase Order: PO040262

Release:

ORIGINAL COMMERCIAL

Page 3 of 3

	iil: cle sales@n loyer Identifica	tion Number (EIN): 36-1458720	McMaster-Carr Number: 526402	CERTIFICATE OF ORIO			
Line	Description			Qty & Unit	Unit Price Extens		
20	95229A490	Cadmium-Plated Steel MIL. Spec. Washer for 3/8 1149-F0663P, Packs of 100 Country of Origin: United States Schedule B #: 731822 ECCN #: EAR99 NLR	" Screw Size, NAS	1 PK	\$6.07	\$6.07	
	NOTE	These items are controlled by the U.S. Governme only to the country of ultimate destination for use end-user(s) herein identified. They may not be residisposed of, to any other country or to any person ultimate consignee or end-user(s), either in their cincorporated into other items, without first obtaining overnment or as otherwise authorized by U.S. Ia	by the ultimate consignee or sold, transferred, or otherwise other than the authorized original form or after being approval from the U.S.				
	NOTE	Tracking number(s) for this shipment: CPK006281051	wana regulations.				
	9						
	177						
	a de la companya de l						

Number of Packages: 1

McMaster-Carr, Supply Company Invoice: 65845254 ORIGINAL COMMERCIAL 200 Aurora Industrial Pkwy Purchase Order: PO040262 Aurora, OH 44202-8087 USA Phone: 330-995-5500 Fax: 330-995-9600 Release: E-Mail: cle.sales@mcmaster.com McMaster-Carr Number: 5264022-04 CERTIFICATE OF ORIGIN Employer Identification Number (EIN): 36-1458720 Ultimate Destination: Shipped: 20-Jun-2018 Dart Aerospace Ltd Shipper's Export Declaration (SED): 1270 Aberdeen St NO EEI 30.36 Hawkesbury ON K6A 1K7 Canada Intermediate Consignee: Bill To: Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada Tax Number: Forwarding Agent: Billing Attention: Shipping Attention: Contact: Description Qty & Unit Line **Unit Price** Extension Hardened 440C Stainless Steel Ball, 1/4" Diameter, Packs of 100 1 9529K15 4 PK \$10.56 \$42.24 Country of Origin: Peoples Republic of China Schedule B #: 848291 ECCN #: EAR99 NLR Noninsulated Quick-Disconnect Terminals, Single-Crimp Female, 16-14 Gauge, 2 69525K16 PK \$7.20 \$14.40 1/4" Wide x 0.032" Thick Tab, Packs of 100 Country of Origin: United States Schedule B #: 853690 EAR99 NLR ECCN#: Wire Rope Compression Sleeve for 1/16" Rope Diameter - Not for Lifting, Packs 6 3896T31 PK \$6.56 \$26.24 of 50 Country of Origin: United States Schedule B #: 761699 ECCN#: EAR99 NLR Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube 7 6641A41 6 EA \$14.36 \$86.16 Country of Origin: United States Schedule B #: 321410 ECCN#: EAR99 NLR Bent-Pull Clevis Pin with Hairpin Cotter Pin, Zinc-Plated Steel, 5/16" Diameter, 8 90146A059 10 EA \$2.59 \$25.90 2-1/2" Usable Length Country of Origin: United States Schedule B #: 731829 ECCN#: EAR99 NLR Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department. Shipping Weight (in kgs): 18 Number of Packages: 1 Invoice Amounts: Merchandise Amount: \$1,070.47 Canadian GST/HST: \$142.31 Package Dimensions: Shipping Charges: \$24.29 52 X 52 X 43 CM = .114 CUBIC M Total (In USD): \$1,237.07 Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days Remit payment to: (by wire transfer) Bank of America (by mail) 222 Broadway McMaster-Carr Supply Company Authorized Signature: Date: New York, NY 10038 20-Jun-2018 PO Box 7690 Account 86666-02021 Sal Weich Chicago, IL 60680-7690 USA **SWIFT BOFAUS3N** 

Page 1 of 3

Name: Sarah Weinberg

Title:

Operations Mgr.

McMaster-Carr Supply mpany 200 Aurora Industrial Pk, 44202-8<sub>17</sub> USA Aurora, OH 44202 Phone: 330-995-5500

E-Mail: cle.sales@mcmast.com

Fax: 330-995-9600

Purchase Order: PO040262 Release:

Invoice: 65845254

ORIGINAL COMMERCIAL

Emp	iil: cle.sales@n loyer Identifica	ation Nuber (EIN): 36-1458720	McMaster-Carr Number: 5264022	-04		CERTIFICA	TE OF ORIGIN
Line	Description			Qty &	Unit	Unit Price	Extension
9	90177A218	Zinc-Play Steel Split Rings, 1" OD, 13/16" ID, 1/8	8" Thick, Packs of 50	2	PK	\$12.26	\$24.52
		Country of <sub>rigin:</sub> United States Schedule By 732620 ECCN #: É <sub>R99</sub> NLR					
10	90281A640	Setup Stud, 3/"-16 Thread Size, 4" Long, 1-1/4" L	ong Threads	25	EA	\$1.65	\$41.25
	1	Country of Origir, United States Schedule B #: ~~1815 ECCN #: EAR99NLR					
11	91030A031	Low-Strength Steel Hange Nut, Black-Oxide, 3/8"	-16 Thread Size	20	EA	\$2.28	\$45.60
		Country of Origin: Unled States Schedule B #: 731816 ECCN #: EAR99 NLR					
12	94975A162	18-8 Stainless Steel Ring-Gip Quick-Release Pin 1-5/16" Usable Length	with Lanyard, 1/4" Diameter,	10	EA	\$4.49	\$44.90
		Country of Origin: United States Schedule B #: 731829 ECCN #: EAR99 NLR					
13	98381A508	Dowel Pin, Alloy Steel, 3/16" Diameter, 3/4" Long,	, Packs of 50	1	PK	\$7.80	\$7.80
		Country of Origin: United States Schedule B #: 731829 ECCN #: EAR99 NLR			A STATE OF THE STA		
14	98470A133	Shoulder-Style Ring-Grip Quick-Release Pin, 18-1 1-5/16" Usable Length	8 Stainless Steel, 1/4" Diameter,	10	EA	\$3.01	\$30.10
		Country of Origin: United States Schedule B #: 731829 ECCN #: EAR99 NLR					
15	9036K499	'Wear-Resistant 1095 Spring Steel, 0.0200" Thick	, 6" Wide, 20 Feet Long	1	EA	\$76.08	\$76.08
		Country of Origin: Taiwan Schedule B #: 722692 ECCN #: EAR99 NLR					
16	8733K243	Cast Nylon Bar, 4" Wide, 3" Thick, 2' Length		2	FT	\$94.00	\$188.00
		Country of Origin: United States Schedule B #: 392092 ECCN #: EAR99 NLR					
17	6718K52	303 Stainless Steel Industrial-Shape Air Hose Co 1/4 NPTF Female End	upling, Plug, 1/4 Coupling Size,	10	EA	\$5.64	\$56.40
		Country of Origin: United States Schedule B #: 848190 ECCN #: 2B999 NLR					
18	59915K274	Corrosion-Resistant Ball Joint Rod End, 3/8"-24	Thread, Right Hand	20	EA	\$17.14	\$342.80
		Country of Origin: United States Schedule B #: 848330 ECCN #: EAR99 NLR					
19	92620A540	Zinc Yellow-Chromate Plated Hex Head Screw, C Size, 3/4" Long, Packs of 100	Grade 8 Steel, 1/4"-20 Thread	1	PK	\$12.01	\$12.01
		Country of Origin: Canada Schedule B #: 731815 ECCN #: EAR99 NLR					
							0.60

McMaster-Carr Supply Com, 200 Aurora Industrial Pkwy Aurora, OH 44202-8087 hone: 330-995-5500

Phone: 330-995-5500

E-Mail: cle.sales@mcmaster.cc

Fax: 330-995-9600

Invoice: 65845254

Purchase Order: PO040262

Release:

McMaster-Carr Number: 5264022-04

INVOICE

**CERTIFICATE OF ORIGIN** 

Employer Identification Numb (IN): 36-1458720

Line	Description		Qty & Unit	Unit Price	Extension
20	75229A490	Cadmium-Ply Steel MIL. Spec. Washer for 3/8" Screw Size, NAS 1149-F0663F <sub>acks</sub> of 100	1 PK	\$6.07	\$6.07
		Country of Orig United States Schedule B #: 1822 ECCN #: EARSNLR			
		ECCN #: EARS <sub>NLR</sub>			
	NOTE	These items are corylled by the U.S. Government and authorized for export only to the country of timate destination for use by the ultimate consignee or end-user(s) herein ide-fied. They may not be resold, transferred, or otherwise disposed of, to any otherwise disposed of, to any otherwise or enuser(s), either in their original form or after being interporated into other ite, without first obtaining approval from the U.S. government or as otherwise, authorized by U.S. law and regulations.			
	NOTE	Tracking number(s) for this sigment: CPK00Q81051	1		
	124				
	\$   				
		r			
		· ·			



Dart Aerospace Ltd. 1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada

## **PURCHASE ORDER** PO040262

Tel (613) 632-5200

Supplier: MCM001-VU

McMaster-Carr Supply Co,

P.O. Box 7690

Chicago, IL 60680-7690 USA Phone: 330 995 5500

Fax: 330 995 9600

1270 Aberdeen Street

Hawkesbury

ON

Ship To:

K6A 1K7 Canada

Phone: 613-632-5200

PO No:

PO040262

PO Date:

6/20/18

Due Date:

**Purchase Order** 

Revision:

6/22/18

**Revision Date:** 

**Ship-To Contact:** 

Lavoie, ChantalPhone:

clavoie@dartaero.com

Via:

Ground

**Pymt Terms:** 

2% 10 Net 30

Freight Terms:

**Special Comments:** 

Line			Supplier			Due	Order	Received		Unit	Extended
Item	Job	Part	Part No	Description	Status	Date	Quantity	Quantity	Balance	Price (USD)	Price
1		SWA3-700	9529K15 100/per pk	Ball Bearing	Firmed	6/22/18	400 Ea	0 Ea	400 Ea	\$0.1056/Ea	\$42.24
2		SWA6A-1900		Female Spade Terminal - 1/4*	Firmed	6/22/18	200 Ea	0 Ea	200 Ea	\$0.072/Ea	\$14.40
3		M4130NR2.000	6 FT	4130 Steel Round Bar 2.000" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft	Firmed	6/22/18	6 ft	on ESF	6 ft	\$39.205/h Al/2/04	
4		M6061T6H0,312	89845K74 6 FT	6061-T6 Hex Bar .312 : MATERIAL:6061- T6/T651/T6510/T6511/T62 ALUMINUM HEX BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS4117/4128/4115/4116 OR QQ-A-200/8 OR AMS- QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	6/22/18	12 ft	12,1°°	12 ft	\$2.018333/A	\$24.22 b/25
5		MT-O1-R0,500	8893K1 6 FT	Tool Steel Round Bar 0.500 dia.	Firmed	6/22/18	12 ft	12 LPA	12 ft	\$2.87/ft A1 18/0	
6		<b>389</b> 6 <b>T</b> 31	50/pk	Ferule 1/16 X 3/8" - Aluminum	Firmed	6/22/18	200 Ea	0 Ea	200 Ea	\$0.1312/Ea	\$26.24
7		601.2045	6641A41	RTV (LOCTITE 598) : RTV, Loctite 598	Firmed	6/22/18	6 Ea	) 0 Ea	6 Ea	\$14.36/Ea	\$86.16

Line			Supplier			Due	Order	Received		Unit	Extende
Item	Job	Part	Part No	Description	Status	Date	Quantity	Quantity	Balance	Price (USD)	Price
8		90146A059	1/pk	Pin Bent-Pull Clevis Pin with Hairpin Cotter Pin 5/16" Dia, 2-1/2" Usable Length	Firmed	6/22/18	10 E	0 Ea	10 Ea	\$2.59/Ea	\$25.9
9		90177A218	50/pk	Split Ring Zinc-Plated Steel Split Ring 1" OD, 13/16" ID, 1/8" Thick	Firmed	6/22/18	100 Ea	0 Ea	100 Ea	\$0.2452/Ea	\$24.5
10		90281A640	1/pk	Threaded Stud 3/8-16 X 4.0"	Firmed	6/22/18	25 Ea	0 Ea	25 Ea	\$1.65/Ea	\$41.2
11		91030A031	. 1/pk	Flange Hex Nut	Firmed	6/22/18	20 E	0 Ea	20 Ea	\$2.28/Ea	\$45.6
12		94975A162	1/pk	Quick Release Pin Quick Release Pin W/Lanyard	Firmed	6/22/18	10 Ea	0 Ea	10 Ea	\$4.49/Ea	\$44.9
13		98381A508	50/pk	Dowel Pin 3/16" X 3/4"	Firmed	6/22/18	50 Ea	0 Ea	50 Ea	\$0.156/Ea	\$7.8
14	179549	98470A133	!	Pin, Quick Release D4811-1	Firmed	6/22/18	10 pos	0 pcs	10 pcs	\$3.01/pcs	\$30.1
15		MC1095S.020		C1095 Blue Tempered Spring Steel Sheet .020 : MCMASTER P/N: 9036K499 X 1 PK MIL-B- 5687D BLUE FINISHED AND POLISHED 1095 SPRING STEEL .020 6" X 20' COIL receive sf	Firmed	6/22/18	10 sf	0 sf	10 sf	\$7.6075/sf	\$76.0
e Item Note	1 roll of	6" x 20 ft = 10 sf			* *						
16 M	1	MT-NYLON 6- B3.000X4.000- W ,	8733K243	CAST NYLON BAR 3" X 4" receive ft	Firmed	6/22/18	2 ft	Oft	2 ft	\$94.00/ft	\$188.0
17	179554	6718K52	B B B B B B B B B B B B B B B B B B B	Fitting, Quick Disconnect D4182-1	Firmed	6/22/16	10 pcs	0 pcs	10 pcs	\$5.64/pcs	\$56.4
18	179548	59915K274		Rod End Bearing D4777-1	Firmed	6/22/18	20 pcs	0 pcs	20 pcs	\$17.14/pcs	\$342.8
19	1	92620A540	100/pk	Hex Head Cap Screw Zinc Yellow-Chromate Plated Hex Head Screw	Firmed	6/22/18	100 Ea	0 Ea	100 Ea	\$0.1201/Ea	\$12.0
20		95229A490	100/pk	Flat Washer	Firmed	6/22/18	100 pcs	0 pcs	100 pcs	\$0.0607/pcs	\$6.0

**Order Notes** 

## **Order Notes**

**Procurement Quality Clauses** 

A005 RIGHT OF ENTRY

A016 PERSONNEL QUALIFICATION

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A032 DOCUMENT SPECIAL REQUIREMENTS

A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS

A040 NOTIFICATION OF QUALITY ESCAPE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENTS

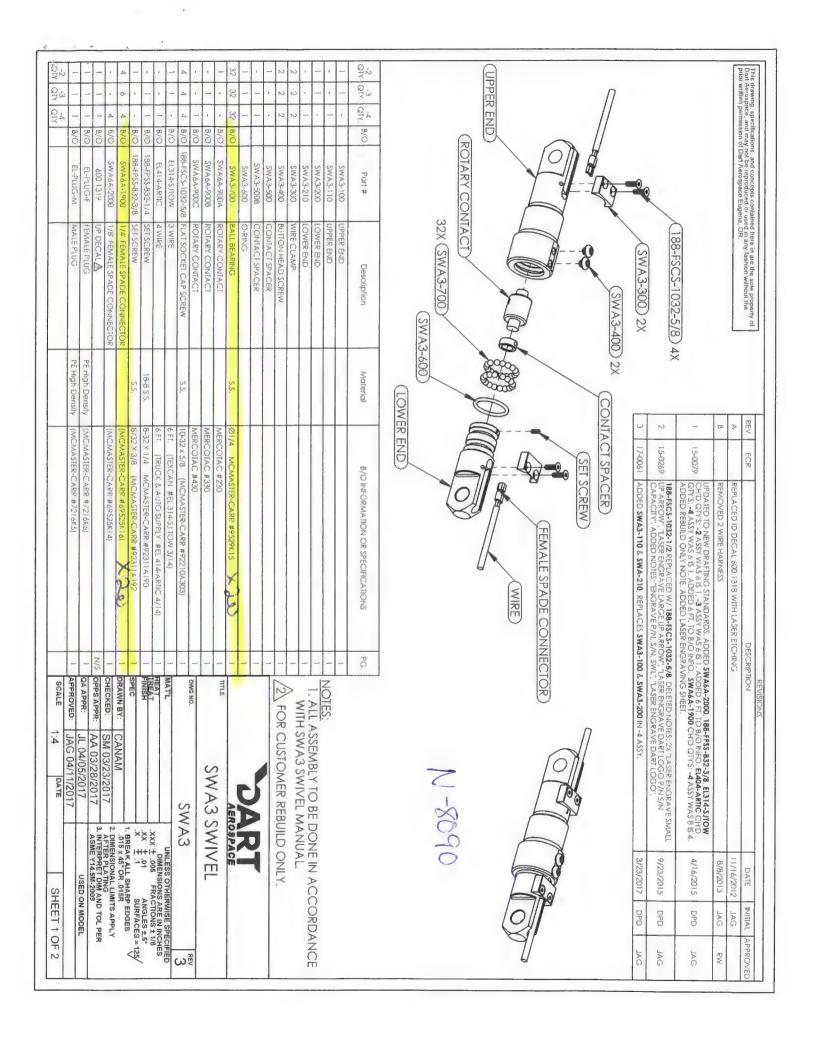
A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS



Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 6/20/18 3:19 PM dart.lavoie.chantal

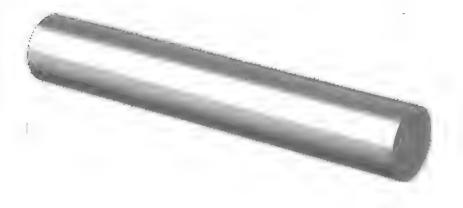


## McMASTER-CARR.

Easy-to-Weld 4130 Alloy Steel Rod

2" Diameter

\$235.23 Each 6673T34



Material 4130 Alloy Steel

Round

Solid

Plain

-0.006" to 0"

Undersized

Not Rated Cold Worked,

Normalized

Not Rated

Hard

Yes

Rockwell C20

**Cross Section** 

Shape

Construction

Appearance

Diameter

**Diameter Tolerance** 

**Tolerance Rating** 

Yield Strength

Fabrication

Temper Rating

Hardness

Hardness Rating

Heat Treatable

Mechanical Finish

Specifications Met

Maximum Hardness after Heat

Treatment

Rockwell C54

Turned and Polished

Temperature Range Not Rated

AMS 2301, AMS

6348, ASTM A108

Not Rated

Straightness

Tolerance

Density 0.28 lbs./cu. in.

22.3 microhm-cm @

Surface Resistivity

68° F  $7.6 \times 10^{-6}$ 

26.5%

Coefficient of

Thermal Expansion

Material

Elongation

Composition

Aluminum 0.039%

Iron 94.53-98.23% Carbon 0.27-0.34%

Chromium 0.80-1.15% Copper 0-0.25%

Hydrogen 0-2 ppm Max.

Manganese 0.35-0.60%

Molybdenum 0.15-0.25%

Nickel 0-0.25% Niobium 0.05% Max. Phosphorus 0.011-0.035% Silicon 0.15-0.40% Sulfur 0.002-0.04% Titanium 0.03% Max. Vanadium 0-0.035% -6" to 6" Length Tolerance Length 6 ft.

RoHS Not Compliant

4130 alloy steel has a low carbon content for good weldability. It's often used for gears, fasteners, and structural applications. These rods have been normalized for consistent hardening and machining.





DESIGN	DRAWN BY	DART AEROSPA HAWKESBURY, ONTARIO	
CHECKED	APPROVED	DRAWING NO. M4130N-R	REV. A
02.04.	19	TITLE 4130 ROUND BAR	SCALE NTS
A	02 04.19	NEW ISSUE	

PURCHASE MATERIAL:

AIST 4130N ROUND BAR PER MIL-5-6758 OR AMS 6348/6370/6528

PART NUMBER:

M4130N-RD.DDD WHERE D. DDO = DIAMETER IN INCHES

DIA

EG. 7/8" ROUND BAR = M4130N-RO.875



## McMASTER-CARR.

6061 Aluminum Hex Bar 5/16" Wide

\$12.11 Each 89845K74

Material 6061 Aluminum

Cross Section

Shape

Hexagon

5/16"

Solid Construction Plain **Appearance** 

Width Width Tolerance

-0.006" to 0.006"

Standard **Tolerance Rating** Yield Strength 35,000 psi Fabrication **Heat Treated** Temper T6 (Hardened)

Hardness Brinell 95 Hardness Rating Soft Heat Treatable Yes

Temperature

Range

-320° to 300° F

Specifications

Met

ASTM B221

Straightness

Tolerance

Not Rated

Magnetic

**Properties** 

Nonmagnetic

Density

0.1 lbs./cu. in.

Surface

25 Ohm-Cir Mil/ft

Resistivity **Melting Point** 

Temperature

1080° F

Modulus of

 $10.0 \text{ ksi} \times 10^3$ 

Elasticity

Thermal

1,390 Btu/hr. ×

Conductivity

in./sq. ft./°F @ 75° F

Elongation

12.5%

Material

Composition

Aluminum 95.1-98.2% Chromium 0.4-0.8% Copper 0.05-0.4% Iron 0-0.7% 0.8-1.2%

Magnesium Manganese

0-0.15%

 Nickel
 0-0.05%

 Silicon
 0.4-0.8%

 Titanium
 0-0.15%

 Zinc
 0-0.25%

 Zirconium
 0-0.25%

 Other
 0.15%

 Length Tolerance
 -1" to 1"

Length 6 ft.

RoHS Compliant

Often fabricated into vehicle parts, pipe fittings, and containers, 6061 is stronger and offers better corrosion resistance than MIC6 and 2011. It's also nonmagnetic, heat treatable, and resists stress cracking.

## McMASTER-CARR.

Tight-Tolerance Multipurpose O1 Tool Steel Rod 0.5000" Diameter

\$17.22 Each 8893K1



Material

O1 Tool Steel

**Cross Section** 

Shape

Round

Solid Construction Appearance Plain 0.5" Diameter

Diameter Tolerance

-0.001" to 0.001"

**Tolerance Rating** 

**Tight** 

Yield Strength

50,000 psi

**Temper Rating** 

Softened (Annealed)

Hardness

Rockwell B90

Hardness Rating

Medium

**Heat Treatable** 

Yes

Maximum Hardness after Heat Treatment Rockwell C65

Mechanical Finish

Precision Ground

Temperature

Range

Not Rated

**Specifications Met** 

ASTM A681

Straightness

**Not Rated** 

Tolerance

Density

0.28 lbs./cu. in.

Coefficient of

Thermal Expansion

 $7.1 \times 10^{-6}$ 

Elongation

25%

Material

Composition

Iron Carbon 94.79-96.95% 0.85-1.05%

Chromium

0.40-0.70%

Manganese

1.00-1.40%

Nitrogen

0.40-0.60%

Phosphorus

0-0.030%

Silicon

0-0.50%

Sulfur

0-0.030%

Tungsten Vanadium 0.40-0.60% 0-0.30%

Length Tolerance

-1 1/2" to 1 1/2"

Length

6 ft.

Additional Guidelines for Heat
Specifications Treating Tool Steel
RoHS Compliant

These precision-ground rods have a tight diameter tolerance. Commonly used for dies, punches, and gauges, O1 tool steel is an oil-hardening material that resists wear and abrasion.

SPECIFICATION CONTROL DRAWING

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 01 TOOL STEEL ROUND BAR
SPECIFICATION: DN 1.251 or 8.5. 80 1 or
SCHOOL STEEL ROUND BAR
WHERE TO DOD!
WHERE TO DOD!
WHERE TO DOD!
WHERE TO DOD!
SET ON TO SET ON

## **Chantal Lavoie**

From:

**Daniel Paquette** 

Sent:

Tuesday, June 19, 2018 8:49 AM

To:

Michelle GagnonDonovan; Chantal Lavoie

Subject:

MT-O1-R0.500

Ref; RBT18609-7

Michelle please enter into PLEX. Thanks.

Chantal please order 6 feet of this. Thanks.

## DANIEL PAQUETTE

Production Engineering Coordinator

DART AEROSPACE T 1 613 632-5200 > 236 F 1 613 632-5246 1 800 556- 4166 www.dartaerospace.com



## Easy-to-Weld 4130 Alloy Steel Rod

6673T34

2" Diameter



Material	4130 Alloy Steel
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	2"
Diameter Tolerance	-0.006" to 0"
Tolerance Rating	Undersized
Yield Strength	Not Rated
Fabrication	Cold Worked, Normalized
Temper Rating	Not Rated
Hardness	Rockwell C20
Hardness Rating	Hard
Heat Treatable	Yes
Maximum Hardness after Heat Treatment	Rockwell C54
Mechanical Finish	Turned and Polished
Temperature Range	Not Rated
Specifications Met	AMS 2301, AMS 6348, ASTM A108
Straightness Tolerance	Not Rated
Density	0.28 lbs./cu. in.
Surface Resistivity	22.3 microhm-cm @ 68° F
Coefficient of Thermal Expansion	7.6 × 10 <sup>-6</sup>
Elongation	26.5%
Material Composition	
Aluminum	0.0397
Iron	94.53-98.23%
Carbon	0.27-0.34%

## Easy-to-Weld 4130 Alloy Steel Rod, 2" Diameter | McMaster-Carr

6/25/2018

0.80-1.15%	0-0,25%	0-2 ppm Max.	0.35-0.60%	0.15-0.25%	0-0.25%	0.05% Max.	0.011-0.035%	0.15-0.40%	0.002-0.04%	0.03% Max.	0-0.035%	1 ft., 3 ft., 6 ft.	
Chromium	Copper	Hydrogen	Manganese	Molybdenum	Nickel	Niobium	Phosphorus	Silicon	Sulfur	Titanium	Vanadium	Length	(

4130 alloy steel has a low carbon content for good weldability. It's often used for gears, fasteners, and structural applications. These rods have been normalized for consistent hardening and machining.





	DESIGN	DRAWN BY	DART AEROSPA HAWKESBURY, ONTARIO,	
	CHECKED	APPROVED	DRAWING NO. M4130N-R	SHEFT I OF I
	02.04.	19	TITLE 4130 ROUND BAIR	SCALE NT
-	A	02 04.19	NEW ISSUE	

PURCHASE MATERIAL: AIST (4130N ROUND BAR
PER MIL-5-6758 OR (AMS 6348)/6370/6528

PART NUMBER:

M4130N- RID. DDD | WHERE D. DDD = DIAMETER IN INCHES DIA

EG. 7/8" ROUND BAR = M4130N-RO.875



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M413; DATE: 18/04 2		PO/BATCH NO.: PD040262/508401
MATERIAL CERT REC'D: 45 QUANTITY RECEIVED: 711 QUANTITY INSPECTED: 711 QUANTITY REJECTED: 0		THICKNESS ORDERED: 2.00"  THICKNESS RECEIVED: 2.00"  SHEET SIZE ORDERED: —  SHEET SIZE RECEIVED: —
DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y(N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	AMS 6348
CORRECT THICKNESS	YN	
PHOTO REQUIRED	YN	
CORRECT REF # TO LINK CERT	(Y) N	60000707
CORRECT MATERIAL IDENTFICATION	N	
CORRECT M# ON THE MATERIAL	(Ŷ) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	YN	
DOES THIS REQUIRE AN EXTRUSION REPORT	YN	
CUT SAMPLE PIEC		ERIAL AND PREFORM A HARDNESS CHECK.  DRD RESULTS BELOW

CUT SAMPLE PIECE OF	MATERIAL A	ND PREFOR	M A HARDNE	SS CHECK.	
Į į	RECORD RES	SULTS BELOV	W		
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	AT DAS	SIGNED OFF BY:
DATE:	19/06/25 989	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

LL.

\$12.11 Each 89845K74



6061 Aluminum Hex Bar

5/16" Wide

Material	6061/Aluminum
Cross Section Shape	Hexagon
Construction	Solid
Appearance	Plain
Width	5/16"
Width Tolerance	-0.006" to 0.006"
Tolerance Rating	Standard
Yield Strength	35,000 psi
Fabrication	Heat Treated
Temper	(T6)(Hardened)
Hardness	Brinell 95
Hardness Rating	Soft
Heat Treatable	Yes
Temperature Range	-320° to 300° F
Specifications Met	ASTM B221
Straightness Tolerance	Not Rated
Magnetic Properties	Nonmagnetic
Density	0.1 lbs./cu. in.
Surface Resistivity	25 Ohm-Cir Mil/ft
Melting Point Temperature	1080° F
Modulus of Elasticity	$10.0 \text{ ksi} \times 10^3$
Thermal Conductivity	1,390 Btu/hr. x in./sq. ft./°F @ 75°
Elongation	12.5%
Material Composition	
Aluminum	95.1-98.2%
Chromium	0.4-0.8%
Copper	0.05-0.4

## 6061 Aluminum Hex Bar, 5/16" Wide | McMaster-Carr

6/25/2018

%2.0-0	0.8-1.2%	0-0.15%	0-0.05%	0.4-0.8%	0-0.15%	0-0.25%	0-0.25%	0.15%	11 P	6 ft.	Compliant
Iron	Magnesium	Manganese	Nickel	Silicon	Titanium	Zinc	Zirconium	Other	Length Tolerance	Length	RoHS

Often fabricated into vehicle parts, pipe fittings, and containers, 6061 is stronger and offers better corrosion resistance than MIC6 and 2011. It's also nonmagnetic, heat treatable, and resists stress cracking.

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL (6061-16)1651.76510.76511.762 ALUMINUM HEX BAR SPECIFICATION.

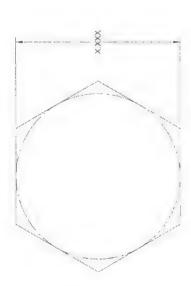
٥

QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR QQ-A-200/8 OR AMS-QQA-200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B221

PART NUMBER:

WHERE "X XXX" = INSCRIBED DIAMETER OF HEX BAR IN INCHES M6061T6H,X XXX

EG 0.5" HEX BAR - M6061T6H0.500





9	REFORMATIONS, A	REFORMAT LING, AT 0 B231 \$ 8221 \$PEC (ZN D8 1) REF PAR 08-020A	c	09 07 13
A	NEW ISSLE		3	54 69 20
REV		DESCRIPTION	B.:	DATE
DESIGN	2	DART AFROSPACE ITD	CFIT	-
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CHECKED	CED . B	DRAWING VO		REV B
MFG. APPR	PPR	M6061T6H	Ĝ,	SHEET LOF 1
APPROVED	WED . JAN	TITLE	c 5 6	SCALE
DE APPR	SH. THE	6061-T6 HEX BAR		NTS
DATE	09 07 13	COPYRIGHT D 2004 BY DART AEMOSPACE LTD	MOSPACE LT	0

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MG DATE: 18/0	6/2	76	40.31	2		PO / BATCI	HNO.: <u>PDOY</u>	026180840
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:				-	THIC	KNESS RECE ET SIZE ORDE	ERED: 0.3(2) ERED: 0.3(2) ERED:	- 1
DESCRIPTION	NC (Che	eck				COMMEN	ITS	
SURFACE DAMAGE	Y	(N)						
CORRECT FINISH	(Ÿ)	N						
CORROSION	Y	(N)						
CORRECT GRAIN DIRECTION	(Y)	N						
CORRECT MATERIAL PER M-DRAWING	M	N	451	MR	221			
CORRECT THICKNESS	(Y)	N		1 130				
PHOTO REQUIRED	Y	(N)						
CORRECT REF # TO LINK CERT	Y	Ň	100	10261				
CORRECT MATERIAL IDENTFICATION	M	N						
CORRECT M# ON THE MATERIAL	(Y)	N						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)						
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N						
		U.		¥				
CUT SAMPLE PIECI			ERIAL A				SS CHECK.	
		_	HRC	HF		DUR A	DUR D	WEBSTER
TYPE OF MATERIAL								TILLOTEIX
SIZE OF TEST SAMPLE								
HARDNESS / DUROMETER READI	NG [							
	tes	sters	located in	the Qual	ity Office			
QC 18 INSPECTION						ENGINEER	RING SIGNOR	FF (if required)
INSPECTED BY:	5	ris'			SIGN	ED OFF BY:		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

DATE:

DATE:

0.40-0.60%

Nitrogen

## McMASTER-CARR

6/25/2018

# Tight-Tolerance Multipurpose O1 Tool Steel Rod 0.5000" Diameter

\$17.22 Each 8893K1



Materia	( Steel
Cross Section Shape	Round
Construction	Solid
Appearance	Plain
Diameter	0.5"
Diameter Tolerance	-0.001" to 0.001"
Tolerance Rating	Tight
Yield Strength	50,000 psi
Temper Rating	Softened (Annealed)
Hardness	Rockwell B90
Hardness Rating	Medium
Heat Treatable	Yes
Maximum Hardness after Heat Treatment	Rockwell C65
Mechanical Finish	Precision Ground
Temperature Range	Not Rated
Specifications Met	ASTM A681
Straightness Tolerance	Not Rated
Density	0.28 lbs./cu. in.
Coefficient of Thermal Expansion	7.1 × 10 <sup>-6</sup>
Elongation	25%
Material Composition	
Iron	94.79-96.95%
Carbon	0.85-1.05%
Chromium	0.40-0.70%
Manganese	1.00-1.40%

6/25/2018

Phosphorus	0-0.030%
Silicon	0-0.50%;
Sulfur	0-0.030%
Tungsten	0.40-0.60%
Vanadium	0-0.30%
Length Tolerance	-1 1/2" to 1 1/2"
Length	6 ft.
Additional Specifications	Guidelines for Heat Treating Tool Steel
RoHS	Compliant

These precision-ground rods have a tight diameter tolerance. Commonly used for dies, punches, and gauges, O1 tool steel is an oil-hardening material that resists wear and abrasion.

O BY APPROVED VM AISI O1 TOOL STEEL ROUND BAR DART MT-01-R DATE EN 17-149 MT-01-R (D.DDD) WHERE "D.DDD" = DIAMETER IN INCHES EG. 5/8\* ROUND BAR = MT-01-R0,625 SPECIFICATION CONTROL DRAWING PURCHASE MATERIAL: AISI OT TOOL STEED ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681 SPECIFICATION: PART NUMBER: ø (I)

O

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M7-01-R3.500 DATE: 18106/25  MATERIAL CERT REC'D: 1214 QUANTITY INSPECTED: 1214 QUANTITY REJECTED: 1214				THICKNESS ORDERED: 0.500" THICKNESS RECEIVED: 0.500" SHEET SIZE ORDERED: — SHEET SIZE RECEIVED: —				
SURFACE DAMAGE	Y	T(N)						
CORRECT FINISH	(Y)	N						
CORROSION	Y	N						
CORRECT GRAIN DIRECTION	M	N						
CORRECT MATERIAL PER M-DRAWING	V	N	ASTM	A681				
CORRECT THICKNESS	V	N						
PHOTO REQUIRED	Y	N	0					
CORRECT REF # TO LINK CERT	V	N	10040	162				
ORRECT MATERIAL IDENTFICATION		N						
CORRECT M# ON THE MATERIAL	Y	N						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Υ	N						
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N						
		- 31						
CUT SAMPLE PIECE	- OE	MAT	TEDIAL AN	ID DDEEO	DM A HARRIE	CC CLIECK		
OUT GAINIT LE FIEUR				ILTS BELC		SS CHECK.		
			HRC	HRB	DUR A	DUR D	WEBSTER	
YPE OF MATERIAL					DONA	DOND	WEBSIER	
IZE OF TEST SAMPLE								
IZL OF TEST SAMPLE								

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY:	SIGNED OFF BY:
DATE: 13/06/25	DATE:

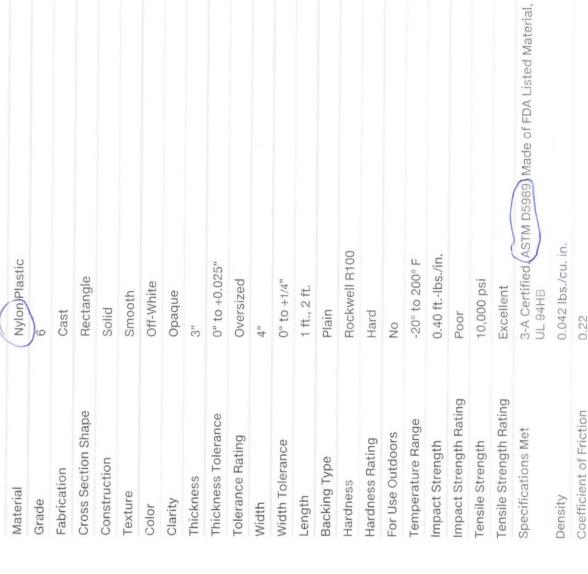
Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

## McMASTER-CARR.

6/25/2018

## Cast Nylon Bar, 4" Wide, 3" Thick

In stock \$94.00 per ft. 8733K243



## Cast Nylon Bar, 4" Wide, 3" Thick | McMaster-Carr

		in./in/°F	ţ
500V/mil	0.60%	5 x 10 <sup>-5</sup> in./in./ºF	Complian
Dielectric Strength	Water Absorption	Coefficient of Thermal Expansion	RoHS

Use these cast nylon 6 sheets and bars for gears, sprockets, and wear strips. They're lightweight, stiff, and easier to machine than other types of nylon. They have a slippery surface and are an excellent insulator. This material is comparable to Nylatron and Nycast.

BY APPROVED HIGHT & 2017 BY DART AEROSPACE LTD CONTRIBUTE AND B SINGE ON NO ENTRY OF POWERS CONDENS THE OWN THAN THE WAY COME FOR SINGE AND COME HAD VM NYLON 6 BAR MT-NYLON 6-B DART 17,08.23 DATE DESCRIPTION EG. 1/4" x 2" WHITE BAR = MT-NYLON 6-B0.250x2.000-W TOLERANCES PER MANUFACTURER SPECIFICATIONS ならしてる WHERE "H.HHH" = HEIGHT IN INCHES WHERE "W.WWW" = WIDTH IN INCHES WHERE "C" = COLOR [W= WHITE] / [B= BLACK] MT-NYLON 6-B[H.HHH]x[W.WWWJ-C REV. SPECIFICATION CONTROL DRAWING NYLON & BAR ASTM D5989 PURCHASE MATERIAL: 5 SPECIFICATION: PART NUMBER:

0

0

U

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-N DATE: 18/06/	4.000-W	PO / BATC	H NO .: 104	10262/5084				
MATERIAL CERT REC'D:  QUANTITY RECEIVED:  QUANTITY INSPECTED:  QUANTITY REJECTED:				THICKNESS ORDERED: 3 " THICKNESS RECEIVED: 3 " SHEET SIZE ORDERED: SHEET SIZE RECEIVED:				
DESCRIPTION	NC (Che	eck			COMMEN	ITS		
SURFACE DAMAGE	_	(N)						
CORRECT FINISH	(1)	N						
CORROSION	Y	(N)						
CORRECT GRAIN DIRECTION	(8)	N						
CORRECT MATERIAL PER M-DRAWING	(Y)	N	AS11	M D598	9			
CORRECT THICKNESS	Y	N						
PHOTO REQUIRED	Y	(N)						
CORRECT REF # TO LINK CERT	(Y)	N	PD 040	1262				
CORRECT MATERIAL IDENTFICATION	M	N						
CORRECT M# ON THE MATERIAL	(Y)	N						
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N						
DOES THIS REQUIRE AN EXTRUSION REPORT	Υ	N						
CLIT SAMPLE DIECE	- OF	N/A T	EDIAL A	ND DDEECE				
CUT SAMPLE PIECE	_ UF I	ECC	ERIAL A	IND PREFOR	IVI A HARDNE	SS CHECK.		
	- R		HRC	ULTS BELO		T DUD 5		
TYPE OF MATERIAL			INC	HRB	DUR A	DUR D	WEBSTER	
SIZE OF TEST SAMPLE	-							
HARDNESS / DUROMETER READIN	NG F							
		tere	located in	the Quality Offi		L		
	103	1613	ocated III	ше чивну Оп	ce			

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

ENGINEERING SIGNOFF (if required)

SIGNED OFF BY:

DATE:

QC 18 INSPECTION

INSPECTED BY:

DATE: 8/06/25 89